(a)   a message marker that can be used to mark a portion of the multimedia document,

wherein the marked portion can be selectively displayed by the receiving participant when the

multimedia document is reproduced.

REMARKS

With reference to the Final Action of March 10, 1998, Applicants offer the following remarks.

Status of the Claims

The pending claims are claims 3-9, 11-24, 26-28 and 33-37. Claims 2, 10, 25 and 29-32 have

been cancelled, and claim 37 has been added. Claim 37 is an independent claim containing

limitations of claims 29-32.

The cancellation of claims 2, 10, 25 and 29-31 reduces the issues on appeal and is made with the

express view of obtaining allowance of the claims. This is because claims 33-36 are no longer

dependent on a claim or claims that have been rejected under 35 USC § 102. This reduces the

number of issues on appeal. Thus, entry thereof is proper under 37 CFR § 1.116(a).

The amendments to claims 5, 17, 18, 20, 22, and 28 present these claims in better form for

consideration on appeal, in that the amended claims now have clear and precise antecedent basis

for "participants." Entry thereof is proper under 37 CFR § 1.116(a).

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The amendment to claim 34 presents this claim in better form for consideration on appeal, in that a double inclusion of a phrase has been removed. Entry thereof is proper under 37 CFR § 1.116(a).

Summary of the Invention

Applicants' claimed invention is a method and system for collaboration among a plurality of participants. The method and system are characterized by the combination of a collaboration video conferencing system with annotation tools and a multimedia mail system. The multimedia mail system allows a sending participant to send a multimedia document to a receiving participant. The receiving participant can be at various venues, e.g:

  (i)   in real time at a location removed from the preparing participant;

  (ii)   at a different time at the same location as the document was prepared; or

  (iii)   at a different time at a location removed from the preparing participant.

Grouping of the Claims

There are two sets of claims, "system" claims and "method of" claims after entry of this amendment. The "system" claims are:

  Claim 37 and claims 33-36 dependent thereon.

  Claim 3 and claim 4 dependent thereon.

  Claim 5 and claims 6-16 dependent thereon.

  Claim 17.

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Claim 18 and claim 19 dependent thereon.

The "method of" claims are:

Claim 20 and claim 21 dependent thereon.

Claim 22 and claims 23-27 dependent thereon.

Claim 28.

Both sets of claims have been rejected as obvious over Rangan in view of Maeno.

Additionally, claims 8-9 and 24 have been rejected over Rangan in view of Maeno, and further in

view of Rosenbaum.

Argument

1.   *Claims 2 and 29-31, Rejections*

In the Final Action of March 10, 1998, the PTO rejected claims 2, and 29-31 as follows:

> **Claims 2, 29-31 are rejected under 35 U.S.C. 102(e) as being
> anticipated by Ahuja et al. US patent 5,471,318.**
> As per claim 2, Ahuja teaches a teleconference system, comprising:
> a teleconference manager [fig.2 MR server 48] configured to manage a
> teleconference among a plurality of participants, wherein at least one of the
> participants is a multimedia service [fig.1 TV, phone, VCR, Camera] configured
> to provide AV signal reproduction [apparent from the use of a VCR] at a
> workstation of another of the participant, or receive video images and spoken
> audio of another participant [col.4 lines 28-49]; and
> a first network [fig.1 network #10] interconnecting the workstations,
> over which a data conference [col.4 lines 16-25] can be conducted, the data
> conference managed by the teleconference manager [fig.1 MR Server 48].
> As per claim 29, Ahuja teaches a teleconferencing system, comprising:

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a teleconference manager [fig.2 MR server 48], configured to manage videoconference and dataconference among a plurality of participants, each participant having a workstation [fig.2 User Workstation #12, #14];

a multimedia server [fig.2 Audio 58, Video 54, Data 50 servers], in communication with the teleconference manager [52], configured to transfer communication data, generated at the workstation of at least one preparing participant to at least one other participant during the videoconference and data conference; and

a storage medium [Col. 11 lines 28-35] in communication with the multimedia server, configured to receive and store the communication data.

As per claim 30, Ahuja teaches audio, video and data shared among the participant [col.8 lines 60-65, col.7 lines 10-55].

As per claim 31, Ahuja teaches storing selected audio, video and data signals [col.12 lines 36-50].

2.   *Claims 2 and 29-31, Discussion*

Claims 2 and 29-31 have been canceled. This rejection is thus obviated, reducing the number of issues on appeal.

3.   *Claims 3-36 Rejection*

Claims 3-36 were rejected as follows in the Final Action of March 10, 1998:

Claims 3-36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Etherphone system as disclosed by Rangan "Software Architecture for Integration of Video Services in the Etherphone System" and further in view of Maeno "Distributed Desktop Conferencing System (MERMAID) Based on Group Communication Architecture".

As per claim 3, Rangan teaches a teleconferencing system essentially as claimed, comprising:

conference capture tools and annotation tool [p.1396 col.1 lines 39-45 "Tiogavision"].

Rangan suggested providing a multimedia mail system [p. 1402 col.1 last paragraph] with captured and annotated data. It is inherent that the multimedia mail can be collaborated in real time at different location (conference call), at different time at same location (mail self-addressed to the author or the workstation), and at different time at different location (mail to another user).

Rangan does not specifically disclose a data conference tool. *Maeno disclose a teleconferencing integrating data and video conferencing. Maeno teaches data conference capture and annotation tools [p.0522 col.1 last paragraph]*. It would have been obvious for one of ordinary skill in the art to

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provide a data conference manager with Rangan's system because it would enable participants to view and process multimedia documents simultaneously with voice + video conferencing [Maeno p.0522 col.1 first paragraph].

As per claims 4, Rangan does not disclose graphical animation device for generating animated graphic images to be included in a multimedia message. It is well known in the art to have animation graphic images in multimedia document. The type of media included in a multimedia mail would have been a matter of design choice dependent on the preference of the user composing the mail message.

Maeno discloses adding annotation and handwriting can be add in real-time to the multimedia document [p. 0522 col.1 last paragraph: writing pad, mouse cursor manipulation]. These tools read on the graphical animation as claimed because the annotation and handwriting would be 'animated' on the receiver's workstation in order to display them in real-time.

As per claim 5, it is rejected under similar rationale as for claim 3 above.

As per claim 6, it is apparent from p.1401 col.2 that AV capture include AV images of the preparing participant and AV image of other participants.

As per claim 7, Rangan teaches message marker [p.1402 col.1 2nd paragraph "annotation icon"].

As per claim 10, Rangan does not specifically disclose a data conference manager for managing data conference. *Maeno disclose a teleconferencing integrating data and video conferencing.* It would have been obvious for one of ordinary skill in the art to provide a data conference manager with Rangan's system because it would enable participants to view and process multimedia documents simultaneously with voice + video conferencing [Maeno p.0522 col. 1 first paragraph].

It is apparent in the system as modified that the conference recorder would record audio, video and data during the conference.

As per claim 11, Maeno teaches data capture tool, annotating shared data [p.0522 col.1 last paragraph].

As per claims 12-13, Rangan teaches conference recorder [p.1401 "Video File Server"]. It is apparent that the mail system would have storage for multimedia document such that it can be retrieve by a participant and information can be transfer between the mail system, conference recorder, and the multimedia document [Rangan p.1402].

As per claim 14, Rangan teaches AV file system for storing and retrieving audio video images [p.1401 "Video File Server"].

As per claim 15, Rangan teaches depository being operable to receive and store multimedia mail messages under direction of the preparing participant [p.1401 "Video File Server"]

As per claim 16, Rangan teaches audio, video and data components [p.1402 col.1 first paragraph].

As per claim 17, it is rejected under similar rationale as for claims 5+10 above.

As per claim 18, it is rejected under similar rationale as for claim 28 below.

As per claim 19, Rangan teaches [p.1402 col.1 2nd paragraph] AV signal carried in either analog [video rope] or digital signal [digitized video frame].

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As per claim 20, it is rejected under similar rationale as for claims 5+10 above. Maeno teaches data capture tool, annotating captured data [p.0522 col.1 last paragraph].

As per claims 21, it is rejected under similar rationale as for claim 4 above.

As per claim 22, it is rejected under similar rationale as for claim 5 above.

As per claim 23, Rangan teaches message marker [p.1402 col.1 2nd paragraph "annotation icon"].

As per claim 25, Rangan teaches conference recorder [p.1401 "Video File Server"]. It is apparent that the mail system would have storage for multimedia document such that it can be retrieve by a participant and information can be transfer between the mail system, conference recorder, and the multimedia document [Rangan p.1402].

As per claim 26, Maeno teaches data capture tool, annotating shared data [p.0522 col.1 last paragraph].

As per claim 27, Rangan and Maeno teach storing and retrieving multimedia document [Rangan p.1401 col.2 lines 8-10, Maeno p.0522 col.1 last paragraph].

As per claim 28, Rangan teaches a method of conducting teleconference, comprising the steps of:

carrying AV signal among the workstations [apparent from fig.1];

managing a videoconference [p.1397]; and

storing, as a multimedia mail message [multimedia document], AV signals generated at the workstation of a preparing participant [p.1401 col.2 lines 2-10]; and

recording AV signal during videoconferencing [p.1401 col.2 line 5 "participant can store parts of their conference"];

storing, as a multimedia mail message [col.1 p.1402 last paragraph], data and AV signal during the conference [p.1401 col.2 lines 2-10 "multimedia document"] and forwarding multimedia mail to a receiving participant [apparent function of an e-mail facility].

Rangan does not specifically disclose a managing data conference. *Maeno disclose a teleconferencing integrating data and video conferencing. Maeno teaches data conference capture and annotation tools [p.0522 col.1 last paragraph].* It would have been obvious for one of ordinary skill in the art to provide a data conference manager with Rangan's system because it would enable participants to view and process multimedia documents simultaneously with voice + video conferencing [Maeno p.0522 col.1 first paragraph].

As per claim 29, Rangan teaches a teleconference system comprising:

teleconference manager [p.1396 fig.1 CM server]

multimedia servers ['video file server'] in communication with the teleconference manager;

storage medium configured to receive and store the communication data [optical disk].

Rangan does not specifically disclose a managing data conference. *Maeno disclose a teleconferencing integrating data and video conferencing. Maeno teaches data conference capture and annotation tools [p.0522 col.1 last paragraph].* It would have been obvious for one of ordinary skill in the art to

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provide a data conference manager with Rangan's system because it would enable participants to view and process multimedia documents simultaneously with voice + video conferencing [Maeno p.0522 col.1 first paragraph].

As per claim 30, Rangan teaches sharing audio and video among the participant [p.1402 col.1 1st paragraph]. Maeno teaches sharing data signal [documents].

As per claim 31, it is apparent from the system as modified that communication data stored comprises audio, video and data.

As per claim 32, Rangan teaches AV capture tools [p.1401 col.2]. Maeno teaches data capture and annotation during a conference [p.0522 col.2].

As per claim 33, Maeno teach using capture and annotation tool to generate multimedia document capable of being stored in real-time [p.0522 col.1 last paragraph to of col.2].

As per claim 34, Rangan teaches using the system as a multimedia mail [p.1402 col.1 last paragraph]. It is inherent that the multimedia mail can be collaborated in real time at different location (conference call), at different time at same location (mail self-addressed to the author or the workstation), and at different time at different location (mail to another user).

As per claim 35, Rangan does not disclose graphical animation device for generating animated graphic images to be included in a multimedia message. It is well known in the art to have animation graphic images in multimedia document. The type of media included in a multimedia mail would have been a matter of design choice dependent on the preference of the user composing the mail message.

Maeno discloses adding annotation and handwriting can be add in real-time to the multimedia document [p. 0522 col.1 last paragraph: writing pad, mouse cursor manipulation]. These tools read on the graphical animation as claimed because the annotation and handwriting would be 'animated' on the receiver's workstation in order to display them in real-time.

As per claim 36, Rangan teaches message marker [p.1402 col.1 2nd paragraph "annotation maker"].

(Emphasis added)

4. Claims 3-36, Discussion

By the Examiner's own admission Rangan does not disclose a data conferencing system. Rangan describes the Xerox Etherphone system. Specifically relied upon in the Final Action is the teaching that

"The user interface to video ropes is through *Tiogavision,* a multimedia document editor that permits video annotations to be freely interspersed with text. Synchronization between editing in *Tiogavision* and storage/retrieval on the optical disc is provided through a general mechanism known as *action reports,* which are event driven message exchanges." (page 1396, column 1)

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and the discussion of the Video File Server on page 1401,

> "In collaborative work, it is often necessary for participants within a conference to jointly record the conference proceedings, or retrieve and display previously stored video information. These mechanisms are provided in our system by the *Video File Server* (VFS). In fact, the semantics of user-to-VFS interaction is subsumed by the conferencing paradigm, and the VFS is accessed by establishing conferences with it. To retrieve a video segment and display it within a conference, the participant invites the VFS to join the conference. The VFS accepts if it has the necessary resources to satisfy a new video storage/retrieval request. Once the VFS accepts, participants can store parts of the conference and retrieve previously stored multimedia documents. An important advantage is using conferencing as the file access mechanism is that multiple participants can jointly perform operations on video files." (p. 1401, column 2)

as well as the discussion in the paragraph bridging the two columns of page 1402,

i.e.,

> "Internally, Tiogavision stores the ID and length of a video rope as attributes of an annotation icon. Video ropes are unique over the entire network, and, hence, video documents created by Tiogavision can be exchanged on the network. Tiogavision can be used to build a powerful e-mail facility, in which users can superimpose their responses over incoming video messages, etc." (p. 1402)

It is therefore submitted that Rangan is neither a teaching nor a suggestion to implement applicants' claimed invention:

To overcome the deficiencies of Rangan, the Examiner has cited Maeno. The Examiner's reliance on Maeno is emphasized in italics above.

But, even if one could or would combine Rangan with Maeno, one would not achieve all the elements of the claimed invention.

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Maeno teaches the ability to store multimedia documents using the MERMAID system. It also teaches adding handwritten comments to documents displayed on PC screens. (Maeno paragraph 3.1.2). But, Maeno does not teach saving the data conferencing event. Applicants are well aware of the MERMAID system and know that it can only save the static, final results of the data conference, not a recording of the event.

Thus, Rangan in combination with Maeno do not yield the claimed invention.

Moreover, Maeno can not be combined with Rangan, because the only suggestion to combine these references is within the four corners of Applicants' own disclosure. This is a prohibited "hindsight reconstruction." It is a matter of well settled law that, "[T]he teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), cited at MPEP § 706.02(j). See also, *In re Geiger*, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987)

It is submitted that the Rangan/Maeno combination's deficiency cannot be overcome. It is not a simple matter to save a combination of video, audio, and data conferencing so that they can be played back "as they happened." There is simply no teaching or suggestion on these or any other reference of the need for this, let alone, how it can be done.

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It is also well settled law that the advantages and desirability of the invention presented by the PTO must stem from the references themselves, not from the PTO's mind or the Applicant's disclosure: "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the PTO must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.' *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)." This burden has not been met by the PTO and these claims should therefore be allowable.

5. Claims 8-9 and 12, Rejection

In the Final Action of March 10, 1998, Claims 8-9 and 12 were rejected as follows:

> Claims 8-9 and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rangan and Maeno, and further in view of Rosenbaum US patent 5,404,435.
>
> As per claims 8-9, Rangan does not teach tag searcher for searching defined tag in multimedia mail message. Rosenbaum teaches a multimedia document system with searchable tags to enable retrieval of the whole or portion of the multimedia document. Hence, it would have been obvious for one of ordinary skill in the art to combine the teaching of Rosenbaum with Rangan and thereby arrives at the claimed invention.
>
> As per claim 24, it is rejected under similar rationale as for claim 8 above.
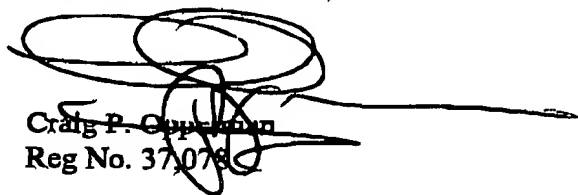
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6.   *Claims 8-9 and 12, Discussion*

Rosenbaum does not overcome the deficiencies of Rangan and Maeno. Rosenbaum relates to

sensing non-text objects in text documents to be archived. Again, this is a hindsight

reconstruction that does not overcome the deficiencies of Rangan combined with Maeno.

CONCLUSION

For the reasons provided above, Applicants respectfully submit that the claims pending in this

application are clearly allowable. If any issues remain unresolved despite the present

Amendment After Final Action, the Examiner is requested to telephone Applicants' attorneys at

the telephone number shown below to arrange for an interview before an Advisory Action is

issued.

Respectfully submitted,

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